

PX 357

Message

From: [REDACTED]
on behalf of [REDACTED]
Sent: 10/23/2018 7:07:28 PM
To: [REDACTED]@ripple.com [REDACTED]@ripple.com [REDACTED]@ripple.com>]
Subject: [REDACTED]
Attachments: Christian Larsen - Sept 2018 [REDACTED] Commentary.pdf

Hi Christian:

Here is the most recent commentary for [REDACTED]

Please email or call if you have any questions or concerns that we can address.

Regards,

[REDACTED] [REDACTED]
[REDACTED] [REDACTED]@com
[REDACTED] [REDACTED]

FUND COMMENTARY: SEPTEMBER 2018

Executive Summary

- The Fund gained [REDACTED] in September due to a strong rally in XRP. Ether (ETH) continued to underperform as it has for much of 2018.
- The New York Attorney General released a 42-page report about risks in the digital asset exchange market. We summarize its findings.
- We also look at current volume and other developments in the Bitcoin futures market. Bitcoin futures have traded an average of \$179 million per day this year through the end of September.

Performance and Market Drivers

In September, the Fund gained [REDACTED]. Positive returns were driven entirely by XRP, which gained more than 60% during the month as most other digital assets fell. CNBC and other financial press ascribed the XRP rally to the anticipated launch of xRapid, Ripple's software for cross border transfers which is geared towards financial institutions and uses XRP as its backbone.¹

Ether (ETH) was the biggest drag on performance, dropping -21.56% in September. ETH had historically benefited significantly from the ICO mania that characterized Q4 2017/Q1 2018. Hundreds of ICOs launched as tokens on the Ethereum platform and/or used ETH as a funding currency to raise assets from the public. As we mentioned in prior commentaries, some of the recent weakness may have been attributable to the slowdown in new ICOs combined with selling pressure from software projects converting the ETH they raised into USD. (In September 2018, ICOs "only" raised \$279 million according to Tokendata.io – still arguably a robust number but down almost 90% from the peak of \$2.43 billion raised via ICOs in January 2018).

Throughout 2018, digital assets have been uncorrelated to traditional asset classes (Figure 1).² This emphasizes the potential for a digital asset allocation to diversify traditional stock and bond portfolios. Because digital assets have historically been both volatile and uncorrelated, even a small allocation has had a significant diversification effect in investor portfolios.

**Fig. 1: Correlation of Daily Returns²
(Jan. 1 – Sept. 30, 2018)**

	S&P 500	NASDAQ	MSCI World	US Fixed Income	Commodities
Bitcoin (XBT)	0.11	0.10	0.09	-0.10	0.04
Ethereum (ETH)	0.19	0.17	0.18	-0.09	0.03
XRP	0.15	0.13	0.14	0.01	0.04
Bitcoin Cash (BCH)	-0.02	-0.03	-0.02	-0.08	0.02
Litecoin (LTC)	0.11	0.12	0.09	-0.06	0.04
Fund	0.17	0.16	0.16	-0.07	0.05

Source [REDACTED]

Standardized Fund returns as of most recent quarter-end (9/30/2018): 1Yr=82.15%; since inception (6/25/2017)=125.18%. Results reflect the reinvestment of dividends and other earnings and are net of fees and expenses. Performance data quoted represents past performance; past performance does not guarantee future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. Performance data current to the most recent month end may be obtained by calling [REDACTED]. Performance over one year is annualized except where otherwise specified.

¹ CNBC: "Beaten-down cryptocurrency XRP surges 80% in 24 hours, nearly triples in value on week."

² "Commodities" refers to the Bloomberg GSCI Commodities Index. "US Fixed Income" refers to the Barclays US Aggregate Bond Index

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New York Attorney General's Report on Digital Asset Exchanges

Most digital assets trade on exchanges, i.e., platforms that match buyers and sellers. In traditional financial services, the term “exchange” often has a specific regulatory definition; the digital asset marketplace uses the term loosely in reference to service providers of varying sophistication and regulatory compliance. In April 2018, the New York Attorney General (NYAG) sent letters to 13 prominent digital asset exchanges requesting information about their businesses, including questions about (1) Ownership and Control, (2) Basic Operation and Fees, (3) Trading Policies and Procedures, (4) Outages and Other Suspensions of Trading, (5) Internal Controls, and (6) Privacy and Money Laundering.³

Meaningful regulatory oversight of digital assets exists in a select-few jurisdictions, most notably New York. In 2015, the New York Department of Financial Services put in place a regulatory framework designed to protect customers located in New York irrespective of the location of the service provider/exchange. However, as suggested by the NYAG report, many unlicensed exchanges likely continue to serve New York residents. The NYAG's inquiry into the exchange landscape sought to protect and inform New York residents who trade digital assets. In September 2018, six months after its initial inquiry, the NYAG released a 42-page report on its investigation into the industry. Figure 2 (below) summarizes its key findings.

Fig. 2: Selected NYAG Findings

Exchange	30d Cumulative Volume (\$m) ⁴	Blocks VPN ⁵	Accepts Fiat Deposits ⁶	Formal Market Manipulation Policy	No Prop Trading ⁷
 HBUS	18,800			✓	✓
 BITFINEX	14,700		✓		
 coinbase	3,700		✓	✓	✓ ⁸
 Bitstamp	2,300	✓	✓		✓
 BITTREX	1,700		✓	✓	✓
 POLONIEX	1,400	✓			
 bitFlyer	1,300		✓		
 GEMINI	750		✓	✓	✓
 itBit	500		✓		? ⁹
 TIDEX	90				

Green check marks denote findings that we generally consider positive.

³ <https://ag.ny.gov/press-release/ag-schneiderman-launches-inquiry-cryptocurrency-exchanges>

⁴ Represents 30 day volume per coinmarketcap.com as of 9/24/18.

⁵ A virtual private network (“VPN”) can be used to mask the jurisdiction of a user. This can make it more difficult for a trading platform to adhere to certain legal and regulatory requirements imposed by certain jurisdictions.

⁶ Acceptance of fiat currency requires formal banking relationships which can offer a useful indicator for evaluating the platform as a business concern.

⁷ This column defines whether platforms trade for themselves on their own venue in a proprietary capacity.

⁸ The NYAG report originally claimed that 20% of Coinbase's volume was from its own trading. Coinbase later clarified in a blog post that it trades on its own venue in order to execute other customer orders on an agency basis. According to the statement, it does not engage in proprietary trading.

⁹ ItBit did not disclose whether it engages in proprietary trading.

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The NYAG report made several notable conclusions:

- 1) **Conflicts of Interest Exist:** Many of the companies surveyed engage in several business lines that would otherwise be restricted or carefully monitored in a traditional trading environment (e.g., proprietary trading and/or personal investments in assets listed on their exchange).
- 2) **Few Exchanges Block the Use of Virtual Private Networks (“VPNs”):** To the extent that an exchange has a weak or non-existent know your customer (KYC) program, allowing VPNs makes it very easy for customers in unsupported jurisdictions to use the platform, and for users to potentially create multiple accounts to engage in wash trading.
- 3) **Lack of Efforts to Stop/Prevent Abusive Trading Activity:** Platforms lack robust real-time and historical market surveillance capabilities, like those found in traditional trading venues, to identify and stop suspicious trading patterns. Few platforms seriously restrict (or even monitor) the operation of “bots” or automated algorithmic trading.
- 4) **Limited Protection of Customer Funds:** Customers are highly exposed in the event of a hack or unauthorized withdrawal. There are serious questions about the scope and sufficiency of the commercial insurance that certain platforms purport to carry. Generally accepted methods for exchanges to audit virtual assets do not yet exist.

These findings generally did not come as a surprise to us. In recognition of the risks pointed out by the NYAG in addition to other risks we previously identified, [REDACTED] made a structural decision before the Fund launched to avoid trading on exchanges *entirely* in the interest of investor protection. On behalf of the Fund, we have historically executed trades exclusively through the over-the-counter (OTC) market with counterparties that a banking regulator licenses and oversees for, among other things, adequate customer disclosures, documented business policies and procedures, and strong anti-money laundering and know-your-customer (AML/KYC) policies.

We believe that the digital asset market is undergoing a gradual transition from a largely unregulated, primarily retail market to a more traditionally regulated financial market with a strong institutional presence. We welcome regulatory oversight as we feel that it speeds the maturation of this asset class, encourages the participation of larger institutional investors and reduces risk for all involved in the ecosystem. Increased institutional participation continues to be one of the pillars of our bullish, long-term view on the asset class, and we view clear regulation as a prerequisite for that to occur.

Checking In on the Bitcoin Futures Market¹⁰

In another sign of increasing institutionalization of the digital asset market, in December 2017, both CME and CBOE listed competing, regulated futures products tied to the price of Bitcoin. The two futures contracts are similar – both settle with a cash payment rather than settling with the “physical” delivery of bitcoins – however, the two contracts differ in their mechanisms to determine the settlement price when futures expire.

¹⁰ The Fund does not invest in Bitcoin futures. This commentary is not intended as a recommendation to buy, hold, or sell Bitcoin futures.

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An official auction on the Gemini Exchange determines the settlement price of the CBOE contract, whereas the CME contract settles to a “Bitcoin Reference Rate” which is a blended price across a group of designated exchanges (currently Bitstamp, Coinbase, ItBit, and Kraken).

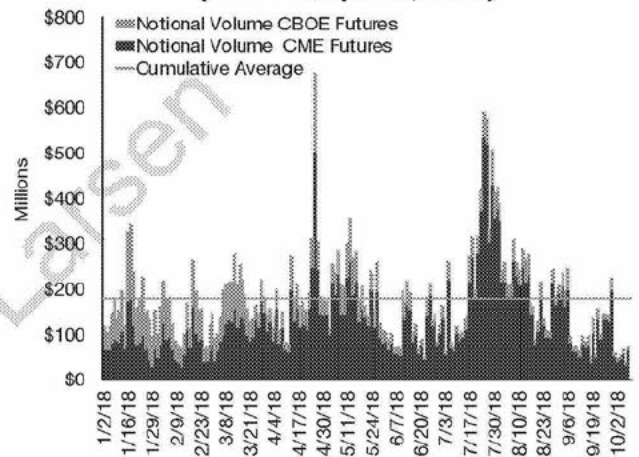
Figure 3 shows the USD notional volume for both contract types along with the cumulative average over 2018. On average, the two futures contracts combined have traded \$179 million per day this year with a handful of volume spikes above \$500 million per day. The CME futures (the futures that settle to a blended price across several Bitcoin exchanges) have garnered a larger and increasing share of overall volume.¹¹

Comments from both CBOE and CME indicate that both firms are also contemplating ETH futures, however neither firm has announced a launch date.¹²

The advent of futures trading is an interesting development on many levels. On a basic level, futures can provide speculators and institutions with an easy way to speculate on and hedge exposure to bitcoin using an instrument that fits neatly within most trading, accounting, investment management, and valuation frameworks.

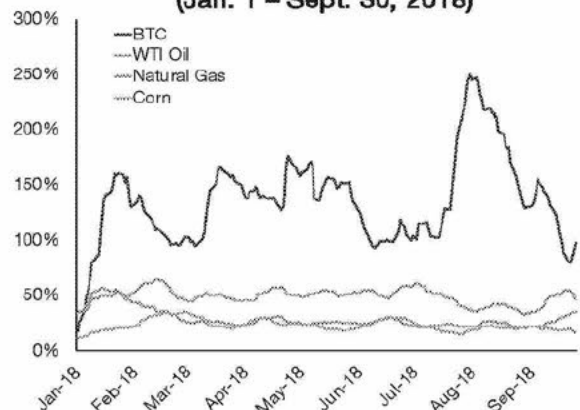
Longer term, if financial market history provides any indication, futures may help the digital asset ecosystem mature. In traditional commodity markets, the futures market originally developed to allow producers and consumers of commodities to hedge the price risk inherent in many businesses. For example, an oil producing company may use futures to hedge the risk of decreasing oil prices before undertaking a large capital expenditure like building a new drilling rig or a new refinery. Bitcoin futures could fulfill a similar role for miners. A Bitcoin miner could use futures to lock in a given price level before undertaking capex like the purchase of Bitcoin mining equipment, real estate, and other costs.

**Fig. 3: Bitcoin Futures Volume
(Jan. 1 – Sept. 30, 2018)**



Source: Bloomberg

**Fig. 4: Ratio of Futures Volume to Open Interest
10-day Rolling Average
(Jan. 1 – Sept. 30, 2018)**



Source: Bloomberg

¹¹ The value of a CME contract (\$31,925) is 5x the dollar value of a CBOE contract (\$6,375) as of October 18, 2018. Since trading commissions are often priced on a per-contract basis, this makes the CBOE contracts 5x more expensive to trade. This may be one factor contributing to CME futures' recent dominance.

¹² CME CF Cryptocurrency Pricing Products; Business Insider, “CBOE is telling market makers that it's getting close to launching ETH futures,” Sept 1, 2018.

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That said, today we believe that there is relatively little commercial hedging in the market and that bitcoin futures are primarily used for speculation. We try to quantify this in Figure 4 by showing the ratio of futures volume (i.e., how much value change hands each day) to the open interest (i.e., how many contracts are outstanding in the market). The chart compares Bitcoin futures to more traditional WTI oil, natural gas, and corn futures. There is significantly more turnover in bitcoin futures relative to other traditional commodity futures which suggests to us a greater share of speculative activity. (We would generally expect commercial participants hedging business risks to have a longer holding period.)

In a new development, the Intercontinental Exchange (“ICE”), the parent company of the New York Stock Exchange, entered the digital asset futures market with the announcement of “Bakkt”, its digital asset-focused subsidiary. In a press release, Jeffrey Sprecher, Founder and CEO of ICE, said, “in bringing regulated, connected infrastructure together with institutional and consumer applications for digital assets, we aim to build confidence in the asset class on a global scale, consistent with our track record of bringing transparency and trust to previously unregulated markets.” Bakkt’s launch partners include Microsoft, BCG, and Starbucks.

According to the company, Bakkt anticipates launching the first physically-settled bitcoin futures. This is operationally much more complex than the cash-settled futures because it requires institutional participants to agree on policies and procedures around the transfer and custody of digital assets. We find it positive to see other financial industry leaders both embracing and accelerating the development of market infrastructure.

We suspect that ICE and other prominent financial institutions like Goldman Sachs that have announced their support of this asset class share our view that the size of the digital asset market will grow meaningfully from its current \$223 billion size.¹³

¹³ Market size as of 9/30/18 according to coinmarketcap.com data.

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RISK DISCLOSURES

An investment in the Fund involves unique and substantial risks, including:

- Values of digital assets have historically been highly volatile, and the value of the digital assets held by the Fund could decline rapidly, including to zero.
- Multiple thefts of digital assets from holders have occurred, and the assets of the Fund could be stolen either partially or in their entirety.

You should be prepared to lose your entire investment. The objective of the Fund is to seek to capture the performance of the digital asset market by investing in a market capitalization-weighted portfolio of digital assets. There can be no assurance that the Fund will achieve its investment objective. Please refer to the Fund's confidential offering memorandum for a full discussion of the risks of investing in the Fund. Investors should carefully consider the Fund's risks and investment objectives, as an investment in the Fund may not be appropriate for all investors and the Fund is not designed to be a complete investment program. An investment in the Fund involves a high degree of risk. It is possible that investing in the Fund may result in a loss of some or all of the amount invested. Before making an investment decision, you should (i) consider the suitability of this investment with respect to your investment objectives and individual situation and (ii) consider factors such as your net worth, income, age and risk tolerance. You should not invest if you have a short-term investing horizon and/or cannot bear the loss of some or all of the investment.

The Fund has limited operating history.

The Fund is currently only being offered on a private placement basis. Shares of the Fund (the "Shares") may be purchased by, and are suitable only for, investors who are "accredited investors" (as defined in Regulation D under the U.S. Securities Act of 1933, as amended (the "Securities Act")). Offers and sales of Shares have not been registered under the laws of any jurisdiction, including the Securities Act, the laws of any state of the United States of America, or the laws of any non-U.S. jurisdiction. The Shares will be offered and sold under the exemption provided by section 4(a)(2) of the Securities Act and Regulation D promulgated thereunder and other exemptions of similar import in the laws of the states of the United States and other foreign jurisdictions where the offerings will be made. There is no public market for the Shares, and no such market is expected to develop in the future.

The Fund will not be registered as an investment company under the U.S. Investment Company Act of 1940, as amended (the "Investment Company Act"). Consequently, investors will not be afforded the protections of the Investment Company Act.

[REDACTED] is a member of NFA and is subject to NFA's regulatory oversight and examinations. However, you should be aware that NFA does not have regulatory oversight authority over underlying or spot virtual currency products or transactions or virtual currency exchanges, custodians or markets.

The Shares will initially have no liquidity and even after the Fund commences the quarterly repurchase offers, the Shares will have limited liquidity.

The Fund intends to conduct quarterly repurchase offers for its Shares to provide liquidity to investors following an IPO or July 1, 2018, whichever is sooner. Repurchase offers may affect the ability of the Fund to be fully invested or force the Fund to maintain a higher percentage of its assets in cash or liquid investments. Shareholders may be subject to market risk and other risks in connection with any repurchase offer and the Fund may incur tax liabilities as a result of sales of digital assets made in connection with any repurchase offer.

This material is only a summary. This summary does not contain the information that you should consider before investing in the Shares. You should review the more detailed information contained in the Offering Memorandum. In particular, you should carefully read the risks of investing in the Shares, as discussed under "Risk Factors".

Certain features of the Fund's investment policies may cause the Fund to not invest in digital assets that are appreciating, and overweight

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relative to digital assets that are depreciating.

If regulatory changes or interpretations require the regulation of one or more digital assets under the Commodity Exchange Act by the CFTC and/or under the Securities Act, Investment Company Act, or U.S. Investment Advisers Act of 1940, as amended, by the SEC, compliance with these requirements could result in additional expenses to the Fund or limit the ability of the Fund to pursue its investment objective.

Regulatory changes or actions may alter the nature of an investment in the Shares or restrict the use of digital assets or the operation of digital asset networks or exchanges in a manner that adversely affects an investment in the Shares. Without limiting the generality of the foregoing, it may be or become illegal to acquire, own, hold, sell or use digital assets in one or more countries.

Values of digital assets have historically been highly volatile. The value of the digital assets held by the Fund could decline rapidly, including to zero.

The Fund's digital assets may be subject to loss, theft or restriction on access, each of which could result in loss to the Fund or the halting of Fund operations. You should not invest unless you understand the risk that the Fund's assets may be stolen. Multiple thefts of digital assets from other holders have occurred in the past. Because of the decentralized process for transferring digital assets, the thefts can be difficult to trace, which may make digital assets a particularly attractive target for theft. The Fund has adopted security procedures intended to protect its assets, but there can be no assurance that those procedures will be successful in preventing such loss, theft or restriction of access. Without limiting the generality of the foregoing, if the source code or cryptography underlying a digital asset held by the Fund proves to be flawed or ineffective, malicious actors may be able to steal the Fund's digital assets.

The further development and acceptance of digital assets, which are part of a new and rapidly changing industry, are subject to a variety of factors that are difficult to evaluate. Without limiting the generality of the foregoing, digital assets face significant scaling obstacles that can lead to high fees or slow transaction settlement times, and attempts to increase the volume of transactions may not be effective. The slowing or stopping of the development or acceptance of such digital assets may adversely affect an investment in the Shares.

The loss or destruction of a private key required to access the Fund's digital assets may be irreversible. The loss of access to the private keys associated with the Fund's digital assets could adversely affect an investment in the Shares.

If a malicious actor or botnet obtains control of more than 50% of the processing power on a digital asset network, such actor or botnet could manipulate the blockchain to adversely affect the Fund's investments or the ability of the Fund to operate.

The digital asset exchanges on which digital assets trade are relatively new and, in most cases, largely unregulated and, therefore, may be more exposed to fraud and failure than established, regulated exchanges for other assets. Any fraud, security failure or operational problems experienced by the digital asset exchanges could result in reduction in value of the digital asset and adversely affect an investment in the Shares.

The Fund may engage in digital asset lending transactions, which could result in losses for the Fund if any borrower under such transaction fails to perform or fails financially, could increase the risk that the Fund's digital assets are lost or stolen, and could negatively impact the trading prices in the digital assets held by the Fund.

These materials were prepared solely for the purpose of furnishing information on a confidential basis to persons interested in the Fund. This information is strictly confidential and proprietary, and its disclosure to an unauthorized recipient could cause significant harm to [REDACTED] or the Fund. By accepting these materials, you agree to maintain this information in the strictest confidence and to protect and safeguard these materials against any unauthorized publication or disclosure. You may not copy or reproduce this information in whole or in part without our prior written consent. You may not distribute these materials or disclose their contents to any person without our consent except to the extent required by law.

These materials do not constitute an offer to sell or a solicitation of an offer to buy Shares. Such an offer, if made, may be made only through the confidential offering memorandum of the Fund and the Fund's constituent documents. The information contained herein is qualified in its entirety by reference to the Fund's confidential offering memorandum, which contains information about

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the investment objective, terms and conditions of the Fund, as well as certain tax information, risk disclosures and information about conflicts of interest.

The information provided herein is based on matters as they exist as of the date of preparation, and may not be updated or otherwise revised to reflect information that subsequently becomes available, or circumstances existing or changes occurring after the date hereof.

Neither the U.S. Securities and Exchange Commission nor any state securities commission has approved or disapproved of the Shares or passed upon the adequacy or accuracy of these materials. Any representation to the contrary is a criminal offense.

Christian Larsen